

Work Order ID 148679

Wednesday, July 06, 2016 8:40:36 AM

148679

Page 1

Item ID: D3166-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Basket Hoop

Start Date: 6/29/2016 Start Qty: 8.00

8

Cust Item ID:

Required Date: 7/5/2016 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan:

DAS

21

Date: JUL 08 2016

Tooling:

Date:

Run Start ***NR1***

QC:

9-89

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3166	Rev A1

100

0.00

100

Skidtubes

Large Fab

Memo

0.27

Large Fab

Cut 3/4" x 3/4" square tubing 60.00" long.

8 CP 16-08-31

110

0.06

110

BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.08

CNC Delta 100 Bender

Form D3166-1 Basket Hoop as per Dwg D3166 using Bending program 350 BASB, and folio 18.

TE 16-10-12

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

Inspect Basket Hoop dimensions with template D3166-1-T1 (DT8302)

8 DAS 43 OCT 14 2016 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐				
Date :	Step #:	QTY Effective :			MRB (QSI042) Approval	
Description Work Order Deviation		Disposition				
					Completed By	
					Lead hand / Supervisor Approval Verification	
					QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐						

Work Order ID 148679

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Page 2

Item ID: D3166-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Basket Hoop

Start Date: 6/29/2016 Start Qty: 8.00

8

Cust Item ID:

Required Date: 7/5/2016 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <i>W404</i>	0.00							
130									
Packaging	Memo	0.01				<i>8x</i>		DAS 43 9-89	OCT 14 2016
Packaging	LOCATION : WA004								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.13						DAS 21 9-89	OCT 14 2016
Quality Control									

DAS 21
9-89**OCT 14 2016**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
8105 # 1 T30								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, July 06, 2016 8:40:36 AM

Page 1

Work Order ID: 148679

148679

Parent Item: D3166-1

D3166-1

Parent Item Name: Basket Hoop

Start Date: 6/29/2016

Required Date: 7/5/2016

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP A02.08.23New issueKJ
IPP: B 08.12.05 Updated bending program on step 3 per NCR W/O43165 KJ
Verified by: EC
IPP Rev:C 09-01-23 as per DEO D3166-A2 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304TS0.750W.065		Purchased	No			100	f	1,111.787	5	42.10526			
M304TS0 750W 065									**	43	16-08-31		
304 SQ Tube .75x.75x.065W													

Location

Loc Qty

Loc Code

WA004

1111.787362

m132270

35.88

m132924

4.177362

m133412

482

m133757

189.73

m134696

400

B135231 → 16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					



DESIGN #	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3166	REV. A SHEET 1 OF 1
DATE 02.07.10		TITLE BASKET HOOP	SCALE NTS
A	02.07.10	NEW ISSUE	
A1	04.04.08	38+/- 1 WAS 36.0	

RELEASED
02.08.06

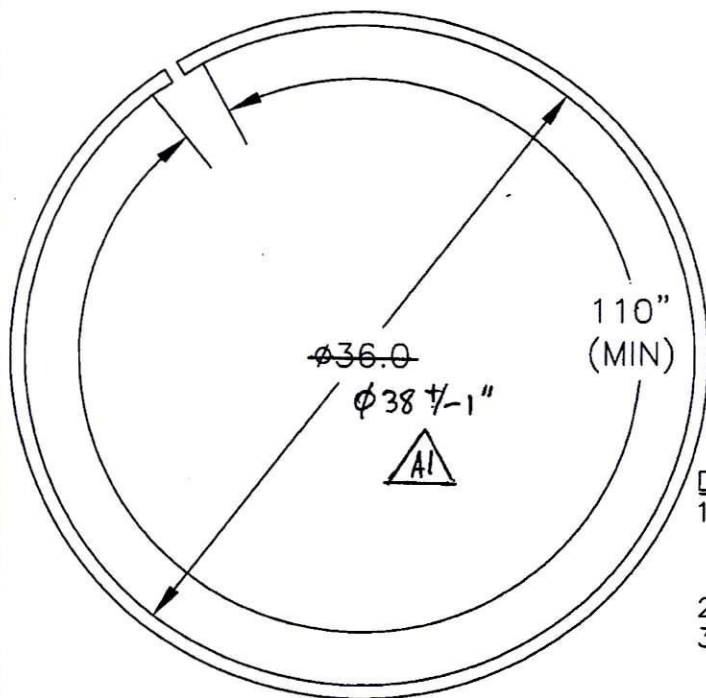
DEO ATTACHED



10.6 (REF, NEED 8.0 MIN)

D3166-1 BASKET HOOP

- 1) MATERIAL: AISI 304/316 SS SQUARE TUBING,
0.75" x 0.75" x 0.063 WALL, 60.00" LONG
(REF DART SPEC. M304TS0.750W.063)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS
OTHERWISE NOTED



NO. 148609A MVS
16-07-08
WITHOUT NOTICE
WORK ORDER
UNCONTROLLED COPY
RETURN TO
ENGINEERING
SHOP COPY

D3166-3 BASKET HOOP

- 1) MATERIAL: AISI 304/316 SS SQUARE TUBING,
0.75" x 0.75" x 0.063 WALL, 120.00" LONG
(REF DART SPEC. M304TS0.750W.063)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS
OTHERWISE NOTED

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DRAWING NO. D3166	TITLE BASKET HOOP	REV A1	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3166-A-2	SHEET NO. 1 OF 1	SCALE NTS
DRAWN AJS	CHECKED <i>[Signature]</i>	MFG. APPR. <i>[Signature]</i>	APPROVED <i>[Signature]</i>		DE APPR. <i>[Signature]</i>		
DATE 08.12.11	DATE 08.12.15	DATE 08/12/15	DATE 08/12/16		DATE 08.12.16		

1) MODIFY MATERIAL NOTE FOR D3166-1 AS SHOWN:

IS:

1) MATERIAL: AISI 304/316 SS, 3/4 X 3/4 X 0.065 WALL SQUARE TUBING,
60.00" LONG
REF. DART SPEC M304TS0.750W.065

WAS:

1) MATERIAL: AISI 304/316 SS SQUARE TUBING,
0.75" x 0.75" x 0.063 WALL, 60.00" LONG
(REF DART SPEC. M304TS0.750W.063)

2) MODIFY MATERIAL NOTE FOR D3166-3 AS SHOWN:

IS:

1) MATERIAL: AISI 304/316 SS, 3/4 X 3/4 X 0.065 WALL SQUARE TUBING,
120.00" LONG
REF. DART SPEC M304TS0.750W.065

WAS:

1) MATERIAL: AISI 304/316 SS SQUARE TUBING,
0.75" x 0.75" x 0.063 WALL, 120.00" LONG
(REF DART SPEC. M304TS0.750W.063)

RELEASED
08/12/16 *[Signature]*

REASON: SEE PAR 08-005

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